Includes 12.2 g/t Au over 15.2 metres in near surface mineralization in Caribou Zone

24.4 g/t Au over 4.2 metres in significant extension of Underdog mineralization

MONTREAL, QUEBEC--(Marketwired - Nov 8, 2016) - Osisko Mining Inc. (TSX:OSK) "Osisko" or the "Corporation") is pleased to announce further new results from the ongoing 150,000 metre drill program at its 100% owned Windfall Lake gold project located in the Urban Township, Québec. The current drill program combines definition drilling above the Red Dog intrusion ("Red Dog"), expansion drilling below Red Dog ("Underdog"), and a newly initiated expansion program down-plunge of the deposit above Red Dog, over 800 metres of strike length to the northeast. Regional exploration drilling to the west of the deposit and on the overall Urban-Barry property is currently ongoing with three active drill rigs. Five drills are currently on the deposit, with an additional four drills planned to the program in the coming weeks. A total of 5 new holes are reported in this release.

Significant new results include: 6.1 g/t Au over 35.4 metres (17.0 g/t Au over 35.4 metres uncut) including 12.2 g/t Au over 15.2 metres (37.6 g/t Au over 15.2 metres uncut) and 24.4 g/t Au over 4.2 metres in DDH OSK-W-16-735; 17.2 g/t Au over 2.4 metres in DDH OSK-W-16-728, and 15.7 g/t Au over 2.0 metres in DDH OSK-W-16-311-W1. The new results demonstrate the potential for significant near-surface mineralization, and the continuity and high potential for significant extensions of the gold mineralization below Red Dog. Details of the new results are outlined in the table below.

Hole No.	From (m)	To (m)	Interval (m)	Au (g/t) uncut	Au (g/t) cut to 100 g/t	Zone	Corridor
OSK-W-16-705 ext	899.0	901.9	2.9	3.54		FW3	Underdog
including	901.1	901.9	0.8	12.3		FW3	Underdog
OSK-W-16-728	363.0	365.4	2.4	42.2	17.2	New	Cfm Vein
including	363.6	364.0	0.4	250	100	New	Cfm Vein
	404.0	404.5	0.5	23.8		New	Cfm Vein
	752.2	754.9	2.7	4.69		Zone 27	Cfm Vein
including	753.1	753.9	0.8	15.6		Zone 27	Cfm Vein
OSK-W-16-311-W1	1118.0	1120.0	2.0	15.7		FW4 HW	Underdog
	1131.0	1132.9	1.9	8.32		FW4	Underdog
including	1131.0	1132.0	1.0	15.7		FW4	Underdog
OSK-W-16-311-W2	1149.3	1152.0	2.7	5.21		FW4	Underdog
including	1150.3	1151.0	0.7	19.9		FW4	Underdog
OSK-W-16-735	58.3	60.5	2.2	13.8		vein	Shear vein
including	58.3	58.9	0.6	48.7		vein	Shear vein
	101.8	137.2	35.4	17.0	6.1	Caribou	Caribou
including	101.8	117.0	15.2	37.6	12.2	Caribou	Caribou
and	103.0	103.5	0.5	10.1		Caribou	Caribou
including	112.0	113.0	1.0	486	100	Caribou	Caribou
and	113.0	113.7	0.7	79.2		Caribou	Caribou
	322.8	325.0	2.2	14.6		Zone 27	Zone 27
including	322.8	323.4	0.6	53.0		Zone 27	Zone 27
	532.4	534.5	2.1	14.1		FW1	Underdog
including	532.4	533.1	0.7	32.8		FW1	Underdog
	554.4	557.8	3.4	10.8		FW1 FW	Underdog
including	554.4	554.8	0.4	76.9		FW1 FW	Underdog
	797.8	800.0	2.2	6.75		FW4 HW	Underdog
including	798.8	799.1	0.3	48.4		FW4 HW	Underdog
	812.0	814.9	2.9	8.57		FW4 HW	Underdog
including	814.4	814.9	0.5	43.0		FW4 HW	Underdog
	824.2	828.4	4.2	33.6	24.4	FW4	Underdog
including	824.2	824.5	0.3	228	100	FW4	Underdog
and	826.8	828.4	1.6	36.8		FW4	Underdog

Notes:

(1) For complete drilling results please see www.osiskomining.com

(2) True Widths are estimated at 65 - 80% of the reported core length interval. See "Quality Control" below.

(3) FW = footwall; HW = hanging wall; Cfm = crustiform

Drill Hole Collar Coordinates and Information

Hole Number	Azimuth (°)	Dip (°)	Length (m)	UTM E	UTM N	Section
OSK-W-16-311-W1	330.3	-62.4	1155	452311	5434424	2325
OSK-W-16-311-W2	330.3	-62.4	1181	452311	5434424	2325
OSK-W-16-705	332.0	-60.0	637.5	452598	5434584	2650
OSK-W-16-728	333.8	-65.7	1420.5	453055	5434890	3200
OSK-W-16-735	330.1	-63.8	1111.5	452288	5434576	2375

DDH OSK-W-16-705 ext was extended to test the FW3 Zone below Red Dog. The FW3 Zone contains pyrite stringers and disseminations in a moderately sericitized volcanic rock unit, returning 3.54 g/t Au over 2.9 metres and confirms continuity of the gold mineralization between two shallowly plunging higher grade shoots.

DDH OSK-W-16-728 final assay results included several crustiform veins which returned 17.2 g/t Au over 2.4 metres and 23.8 g/t Au over 0.5 meters from the hanging wall of the Caribou Zone (the main zone, previously reported, returned 391 g/t Au over 3.1 metres, see September 19, 2016 press release). Another crustiform vein was intersected in the ENE extension of Zone 27 and returned 4.69 g/t Au over 2.7 metres.

DDH OSK-W-16-311-W1 intersected 15.7 g/t Au over 2.0 metres in the hanging wall of the FW4 Zone below Red Dog. The FW4 Zone returned 8.32 g/t Au over 1.9 metres in a bleached andesite at the contact with a porphyry dyke containing pyrite.

DDH OSK-W-16-311-W2 tested the FW4 Zone 90 metres to the SW of DDH OSK-W-16-311-W1, and intersected 5.21 g/t Au over 2.7 metres in a strongly silicified porphyry dyke containing pyrite stringers and disseminations.

DDH OSK-W-16-735 further confirmed the near surface extension of the Caribou Zone with 6.1 g/t Au over 35.4 metres (17.0 g/t Au over 35.4 metres uncut) including 12.2 g/t Au over 15.2 metres (37.6 g/t Au over 12.2 metres uncut). This intercept is located within 90 metres from surface and is 40 metres below previously reported hole EAG-10-240 which returned a similarly strong result of 16.1 g/t Au over 13.0 metres. The intercept contains pyrite stringers and dissemination and visible gold at the contact between volcanic rocks and a strongly silicified and sericitized porphyry dyke.

Zone 27 returned 14.6 g/t Au over 2.2 metres in a strongly silicified and sericitized andesite with pyrite stringers with visible gold. This intercept expands Zone 27 by 36 metres along strike to the WSW.

The FW1 Zone returned 14.1 g/t Au over 2.1 metres in a strongly silicified and sericitized porphyry dyke containing pyrite stringers with visible gold. This intercept is a 200 metres step-out up-plunge from the known mineralization in FW1 and demonstrates the high potential to increase the size of the mineral resource below Red Dog. This intercept was followed by 10.8 g/t Au over 3.4 metres located 15 metres further to the NW in a strongly sericitized and silicified porphyry dyke containing pyrite stringers with visible gold.

A new zone was encountered in the hanging wall of the FW4 zone which returned 8.57 g/t Au over 2.9 metres in a strongly silicified porphyry dyke containing visible gold.

The FW4 Zone returned 24.4 g/t Au over 4.2 metres (33.6 g/t Au over 4.2 m uncut) at the strongly sericitized and silicified contact between two porphyry dykes with pyrite stringers and dissemination, and visible gold. This intercept is located 70 metres to the WSW from previously reported DDH OSK-W-16-704-W1 which returned 25.1 g/t Au over 2.0 metres in a very sparsely drilled sector below Red Dog. The intercept highlights the strong potential for expanding the Underdog mineralized zones with further drilling.

Full analytical results from the seven new drill holes are available at www.osiskomining.com.

Qualified Person

The scientific and technical content of this press release has been reviewed, prepared and approved by Mr. Jean-Philippe Desrochers, Ph.D., P.Geo. Senior Project Manager of the Windfall Lake gold project, who is a "Qualified Person" as defined by National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101").

Quality Control

True widths of the new exploration intercepts below Red Dog reported in this press release have yet to be determined. Additional drilling is planned for the immediate area which will enable the true width determination. True widths of intercepts in the zones above the Red Dog are estimated at 65-80% of the reported core length intervals. Assays are uncut except where indicated. All NQ core assays reported were obtained by either 1 kg whole rock metallic screen/fire assay or standard 50 gram

fire-assaying with AA or gravimetric finish at ALS Laboratories in Val d'Or, Québec or Sudbury, Ontario. The 1 kg metallic screen assay method is selected by the geologist when samples contain coarse gold or present a higher percentage of pyrite than surrounding intervals. All samples are also analysed for multi-elements, including silver, using an Aqua Regia-ICP-AES method at ALS laboratories. Drill program design, Quality Assurance/Quality Control and interpretation of results is performed by qualified persons employing a QA/QC program consistent with NI 43-101 and industry best practices. Standards and blanks are included with every 20 samples for QA/QC purposes by the Corporation as well as the lab. Approximately 5% of sample pulps are sent to secondary laboratories for check assays.

About the Windfall Lake Gold Deposit

The Windfall Lake gold deposit is located between Val-d'Or and Chibougamau in the Abitibi region of Québec, Canada. The current mineral resource comprises 2,762,000 tonnes at 8.42 g/t Au (748,000 ounces) in the indicated category and 3,512,000 tonnes at 7.62 g/t Au (860,000 ounces) in the inferred category (sourced from a technical report dated June 10, 2015 entitled "Preliminary Economic Assessment of the Windfall Lake Gold Property, Québec, Canada" with an effective date of April 28, 2015, prepared in accordance with NI 43-101). The Windfall Lake gold deposit is currently one of the highest grade resource-stage gold projects in Canada. The bulk of the mineralization occurs in the Main Zone, a southwest/northeast trending zone of stacked mineralized lenses, measuring approximately 600 metres wide and at least 1,400 metres long. The deposit is well defined from surface to a depth of 500 metres, and remains open along strike and at depth. Mineralization has been identified only 30 metres from surface in some areas and as deep as 870 metres in others, with significant potential to extend mineralization up and down-plunge and at depth.

About Osisko Mining Inc.

Osisko is a mineral exploration company focused on the acquisition, exploration, and development of precious metal resource properties in Canada. Osisko holds a 100% in the high-grade Windfall Lake gold deposit located between Val-d'Or and Chibougamau in Québec and holds a 100% undivided interest in a large area of claims in the surrounding Urban Barry area (82,400 hectares), a 100% interest in the Marban project located in the heart of Québec's prolific Abitibi gold mining district, and properties in the Larder Lake Mining Division in northeast Ontario, including the Jonpol and Garrcon deposits on the Garrison property, the Buffonta past producing mine and the Gold Pike mine property. The Corporation also holds interests and options in a number of additional properties in northern Ontario. Osisko continues to be well financed and has approximately $80 million in cash and cash equivalents as well as marketable securities of approximately $60 million.

Cautionary Note Regarding Forward-Looking Information

This news release contains "forward-looking information" within the meaning of the applicable Canadian securities legislation that is based on expectations, estimates and projections as at the date of this news release. The information in this news release about, potential mineralization, the ability to realize upon any mineralization in a manner that is economic, the ability to complete any proposed exploration activities and the results of such activities; the continuity or extension of any mineralization; and any other information herein that is not a historical fact may be "forward-looking information". Any statement that involves discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, future events or performance (often but not always using phrases such as "expects", or "does not expect", "is expected", "anticipates" or "does not anticipate", "plans", "budget", "scheduled", "forecasts", "estimates", "believes" or "intends" or variations of such words and phrases or stating that certain actions, events or results "may" or "could", "would", "might" or "will" be taken to occur or be achieved) are not statements of historical fact and may be forward-looking information and are intended to identify forward-looking information. This forward-looking information is based on reasonable assumptions and estimates of management of Osisko, at the time it was made, involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Osisko to be materially different from any future results, performance or achievements expressed or implied by such forward-looking information. Such factors include, among others, risks relating to property interests; ability to obtain required approvals, complete definitive documentation and complete transactions on the terms announced, ability of Osisko to complete further exploration activities, including drilling; the results of exploration activities; risks relating to mining activities; the global economic climate; metal prices; dilution; environmental risks; and community and non-governmental actions. Although the forward-looking information contained in this news release is based upon what management believes, or believed at the time, to be reasonable assumptions, Osisko cannot assure shareholders and prospective purchasers that actual results will be consistent with such forward-looking information, as there may be other factors that cause results not to be as anticipated, estimated or intended, and neither Osisko nor any other person assumes responsibility for the accuracy and completeness of any such forward-looking information. Osisko does not undertake, and assumes no obligation, to update or revise any such forward-looking statements or forward-looking information contained herein to reflect new events or circumstances, except as may be required by law.

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